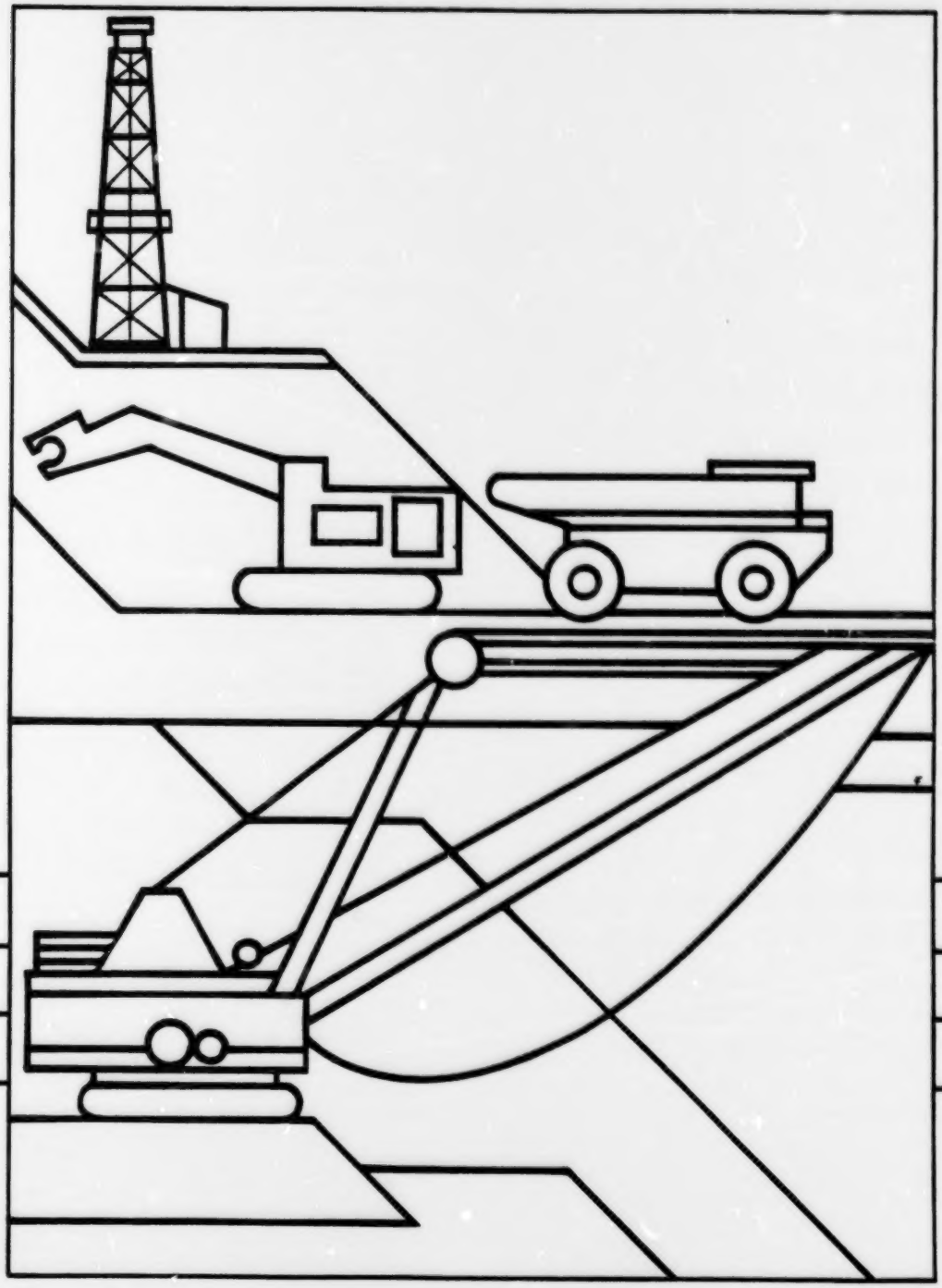
OSLO

OIL SANDS PROJECT



Canada

OSLO Oil Sands Mining Project

1. **What?**

- The Other Six Leases Operation (OSLO) is a six-company joint venture led by ESSO Resources Ltd. The other partners are Canadian Occidental Petroleum Ltd., Gulf Canada Resources Ltd., Petro-Canada Inc., Alberta Oil Sands Equity and Pan Canadian Petroleum Ltd. This will be Canada's third oil sands mining project. The Suncor plant opened in 1967 and Syncrude in 1978. All three are near Fort McMurray, Alberta.

- Other Six Leases Operation refers to six leases held by the original Syncrude partners in addition to the Syncrude leases. After testing the resources on all six leases, the consortium has identified Lease 31 as containing the best grade and most accessible ore body for the next integrated mining, extraction and upgrading plant.

- Lease 31 contains 3.5 billion barrels of surface mineable bitumen capable of supporting the recovery of 77 000 barrels a day. The deposit is capable of supporting three major oil sands plants for more than 40 years.

- OSLO will produce 77 000 barrels a day of synthetic crude oil (SCO). The employment benefits of the project would total 56,000 person-years (22,000 direct and 34,000 indirect) during the six-year development phase, and 6,270 jobs (2,770 direct and 3,500 indirect) over a 35-year operating phase.

- The project sponsors will spend approximately $4.1 billion over the six-year development phase and another $40.3 billion as spent dollars over the 35-year operating phase.

2. Who

- Over the full construction phase, the two governments will provide loan guarantees of up to $1.2 billion and contributions of up to $850 million, plus an additional $160 million indexed to oil prices. The governments will share a Net Profit Interest in the project of 16 per cent payable after the guaranteed loans are repaid.

- ESSO Resources Ltd. has a 25 per cent share in the Other Six Leases Operation (OSLO) consortium, Canadian Occidental Petroleum Ltd. holds 20 per cent, Gulf Canada Resources has 20 per cent, Petro-Canada Inc. owns 15 per cent, Alberta Oil Sands Equity 10 per cent and PanCanadian Petroleum Ltd. 10 per cent. The latter four partners are almost entirely Canadian owned, making the consortium over 60 per cent Canadian.

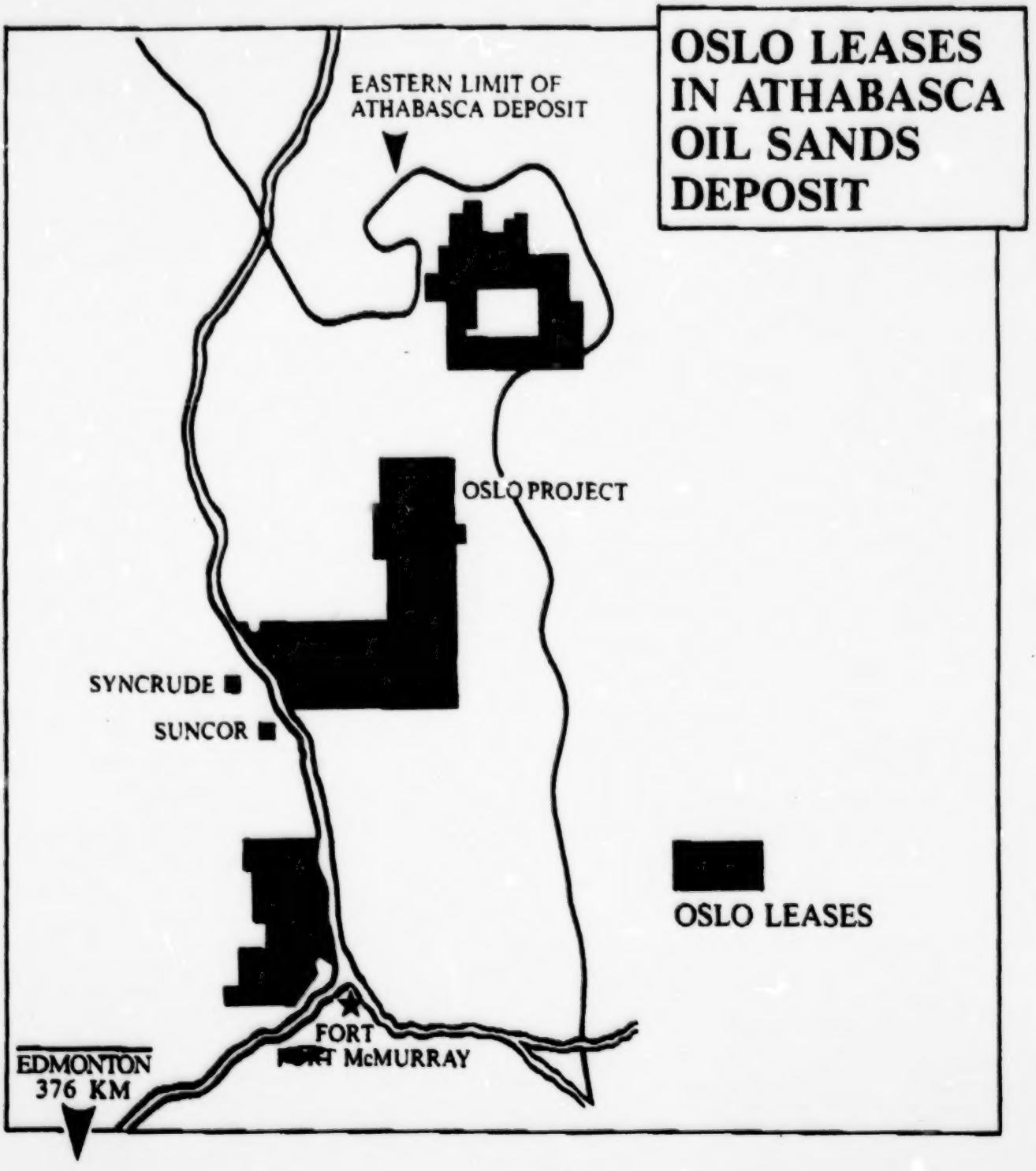
- The Canadian content of this project will be about 80 per cent, based on labour and supplies. The labour will be Canadian as will 70 per cent of the construction materials and equipment.

3. **Where**

- OSLO is located in the Athabasca deposit in northeastern Alberta, the largest of the province's three major oil sands deposits, and the one where the resource is nearest the surface and most suitable for surface mining.

- The initial and sustaining capital spending and operating costs of the OSLO project will result in higher economic activity through the country. Economic benefits, as measured by real (1988 $) Gross Domestic Product (GDP), associated with the project are expected to add $16.1 billion to Alberta's economy, $3.4 billion to Ontario's economy, $0.9 billion to Québec's economy and $1.2 billion to other provincial economies.

- Direct and indirect employment benefits resulting from the 6-year construction phase are estimated to total 56 000 person-years. Of those, 39 100 will be in Alberta and 16 900 in the rest of Canada. There will be 6 270 permanent jobs created during the 35-year operating phase, of which 5 470 will be in Alberta and the balance elsewhere in the country. There will be a native employment program.


OSLO LEASES IN ATHABASCA OIL SANDS DEPOSIT
EASTERN LIMIT OF ATHABASCA DEPOSIT
OSLO PROJECT
SYNCRUDE
SUNCOR
FORT McMURRAY
EDMONTON 376 KM
OSLO LEASES

4. How?

- The Western Accord, an agreement between the Governments of Alberta, British Columbia, Saskatchewan and Canada signed in March 1985, deregulated the oil industry and created a favorable fiscal and market framework for developments such as OSLO.

- Phase one engineering and site preparation will be completed by July 1, 1991 on a shared cost basis. If it is determined that the project remains economically attractive, construction of the plant will proceed. If, however, it is projected that the estimated return on investment is less than 5 per cent (over and above inflation), or that costs exceed $4.5 billion, governments or sponsors could decide not to proceed.

- Environmental concerns will be weighed equally with economic considerations. With public input into its development, OSLO will prepare a comprehensive environmental impact assessment for review by governments and the Alberta Energy Resources Conservation Board. The project will proceed only once any problems that may be identified have been addressed.

- Canada is already a leader in oil sands technology; OSLO will ensure continued growth in this field and will lead to improved mining, extraction and upgrading techniques for the next generation of plants.

5. Why?

- Canadians need to build on their knowledge of how to exploit this huge energy resource. OSLO means jobs, a good return on investment, but most of all greater Canadian capacity to develop our own resources.

- OSLO will help Canada come closer to fulfilling its own energy needs, thereby reducing our oil imports. The vision that led to development of Syncrude is paying off now in lower production costs and improved technology. These lessons will be built upon in the OSLO project.

- Canada's conventional oil reserves will not be enough to meet our future needs. The mix of energy sources upon which we will need to depend will include synthetic crude oil from development and upgrading of our vast resources of bitumen, the heaviest, thickest form of petroleum. Alberta is one of the world's two largest known bitumen sources.

- A development of the magnitude of OSLO requires years of lead time. We must prepare now for the time when its production will be more economic. Development costs are also lower now.

- The OSLO partners are also involved in the existing Syncrude operation. They could expand Syncrude or develop OSLO, but not both. OSLO offers several advantages, including a richer ore body, more physical space compared to the Syncrude site, and the chance to use improved technology.

- OSLO represents an attractive participation opportunity for governments. Canada expects to earn a reasonable return on its participation. The project remains viable even at low oil prices and becomes very attractive in the $20 to $24/bbl range. OSLO's economics become even more attractive once future expansion of the

project is launched. The infrastructure is being paid for with the initial development.

OSLO CHRONOLOGY

1981	• October	- OSLO consortium formed.
1982-1983		- Exploration and engineering studies
1984		- Exploration and geotechnical programs - Lease 31 selected for further detailed evaluation
1985		- Definition of project site - Engineering feasibility studies - Preliminary cost estimates
	• March 28	- The Western Accord was signed by B.C., Alberta, Saskatchewan and Canada.
1986		- Environmental field programs - Technology evaluation studies
1987		- Project definition — a fully integrated 77 000 b/d synthetic crude oil production plant - Proposal to Provincial and Federal governments covering fiscal terms for the project
1988	• September 24	- Statement of principles signed
1989		- Definitive agreement signed
1988-91		- Definitive planning, basic design, and pre-appropriation site work.
1991-1995		- Detailed engineering and construction.
1996		- Production start-up